

PAPERS READ.

DESCRIPTIONS OF NEW AUSTRALIAN LEPIDOPTERA,
WITH ADDITIONAL LOCALITIES FOR
KNOWN SPECIES.

BY THOMAS P. LUCAS, M.R.C.S., ENG., L.S.A., LOND., L.R.C.P.
& M., ED.

I have to thank Mr. Meyrick for his continued kindness and assistance in determining the genus in many instances, and for comparing specimens in the British Museum, &c. I have also to thank Mr. Illidge, Dr. Turner, and Messrs. Meek, jun., and Barnard for their great assistance and loan of specimens.

It is most interesting to note the large number of species found at Geraldton, N. Queensland, common to Ceylon; the species generally are of Indian and Malayan types.

Group SPHINGIDÆ, Family SESIADÆ.

SESIA IGNIFLUA, sp.nov.

♂♀. 14-15 mm. Head, palpi, and antennæ black, frontal rim golden tinted with blue. Thorax fire-coloured, bordered laterally and posteriorly with black. Abdomen black, with base of segments yellowish-white, those of centre segments most conspicuous. Forewings very narrow, somewhat club-shaped, costa straight, apical half rounded, apex and hindmargin rounded, fire-coloured sparingly tinted with blue, a spot at base black, submedian and transverse veins black, and at $\frac{1}{2}$ costa a black streak begins in scattered dots, but broadens at $\frac{2}{3}$ to form a marginal band and to enclose a fire-coloured subapical spot, in some specimens the black

more distributed over the fire ground colour as minute specks : cilia ochreous and greyish-black. Hindwings colourless, transparent, veins black, hindmargin bordered with fire-colour clouded with black, narrowing to a line on inner border ; cilia black.

Brisbane ; in scrub.

Some three years ago I found empty pupa cases projecting from the bark of the Quondong tree (*Elæocarpus grandis*), but failed to obtain the perfect insect. Dr. Turner succeeded in capturing seven specimens this year and has courteously given me a pair.

Group B O M B Y C I N A, Family ARCTIADÆ.

NUDARIA.

A. Head white.

Forewings with fuscous-ochreous lines..... 1. *albida*.

B. Head irrorated, or tinted, with darker.

a. Forewings with entire costal line fuscous-black 2. *obducta*.

b. Forewings without entire costal line black.

1. Forewings without continuous transverse veins.

i. ♂ with subcostal dark fold..... 3. *Barnardi*.

ii. With scattered irregular dots..... 5. *macilenta*

2. Forewings with transverse fascia and lines..... 4. *mollis*.

1. NUDARIA ALBIDA, Walk.

♂♀. 15-18 mm. Head white. Palpi ochreous. Antennæ fuscous-grey. Forewings with costa rounded, hindmargin rounded, creamy-white, with light ochreous-fuscous and grey markings ; four pale ochreous-fuscous transverse lines undulate and denticulate ; the first from $\frac{1}{5}$ costa to $\frac{1}{5}$ inner margin, is sharply angled and interrupted before middle ; the second from before $\frac{1}{2}$ costa to $\frac{1}{2}$ inner margin ; the third from $\frac{3}{4}$ costa to $\frac{4}{5}$ inner margin ; the fourth extending from $\frac{3}{4}$ costa to $\frac{3}{4}$ hindmargin, but interrupted

in the middle of the wing; a hindmarginal row of ochreous-fuscous dots; a dark suffused streak uniting first and second lines along inner margin, two minute but conspicuous black dots in disc, one each immediately before 1st and 2nd lines: cilia creamy-white. Hindwings and cilia creamy-white.

Queensland; in scrubs and at light.

Meyrick in his monograph refers to this as a species unknown to him. He was afterwards able to identify it from specimens I sent. Walker's description is incomplete and not absolutely correct. I therefore redescribe it.

2. *NUDARIA OBDUCTA*, sp.nov.

♂♀. 12-16 mm. Head, palpi, and antennæ light grey. Thorax grey, abdomen whitish-grey, darker grey at base of segments. Forewings with costa rounded, hindmargin rounded, light grey, with spots and blotches of darker grey; a streak of black-grey along centre of wing at base; costal line dark fuscous-grey, interruptedly thickened with darker spots; veins grey, with a conspicuous row of hindmarginal black-grey dots; a diffused grey fascia from $\frac{1}{8}$ costa to $\frac{1}{2}$ inner margin, where it forms a conspicuous black-grey blotch, thence suffused along inner margin, becoming obsolete toward anal angle; an oblong patch of black-grey from $\frac{2}{5}$ to $\frac{3}{5}$ costa for one-fourth the breadth of wing; an angled black-grey blotch at $\frac{4}{5}$ costa: cilia white-grey. Hindwings white lightly tinted with grey; hindmarginal line darker grey; cilia as forewings.

Brisbane to Mackay; in scrub, rare.

3. *NUDARIA BARNARDI*, sp.nov.

♂♀. 12-14 mm. Head whitish-grey. Antennæ ochreous. Thorax and abdomen ochreous-white. Forewings with costa gently rounded, hindmargin rounded, white, semi-hyaline, thinly scaled; veins indistinctly ochreous, darker on hindmargin, in ♂ a dark fuscous-grey fold of wing from opposite middle of base to costa at $\frac{3}{5}$; three or four light ochreous indistinct spots along costa, more marked in ♀; a row of hindmarginal dots of same

colour: in the female in addition a stained spot showing from undersurface below median at $\frac{2}{5}$, two small dots between this and costa at $\frac{1}{6}$, dots near base and at $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ of inner margin, and an irregular row of submarginal dots larger than the hindmarginal dots; a small discal and discoidal spot at $\frac{1}{3}$ and $\frac{2}{3}$ dark black: cilia white. Hindwings as forewings, without markings except that veins are shaded toward hindmargin; cilia white.

Geraldton, Johnson River, Queensland (Messrs. Meek and Barnard).

4. NUDARIA MOLLIS, sp.nov.

♂♀. 13-15 mm. Head, antennæ, thorax and abdomen light ochreous. Forewings with costa rounded, hindmargin rounded, white, freely diffused and marked with light ochreous-fuscous; a small black dot on costa near base, subtending a second before middle of wing, and a third near inner margin at $\frac{1}{3}$; second dark fuscous dot on costa at $\frac{1}{3}$; and a third at $\frac{2}{3}$ costa, which subtends a light ochreous fascia, extending parallel to hindmargin, to a dark ochreous dot on $\frac{1}{3}$ inner margin; this is broad on costa, becoming a line before middle, and is dentate $\frac{1}{3}$ from inner margin; a conspicuous fuscous-black discal spot at $\frac{1}{2}$; interrupted short lines and dots of fuscous-ochreous along costa; an ochreous fascia from a dark spot $\frac{2}{3}$ costa to $\frac{4}{5}$ inner margin, thrice sharply angled in costal half, thence curved inward and then outward on inner half; a minute discoidal spot at $\frac{3}{4}$ in a line with discal spot; beyond this a broad fuscous-ochreous fascia, rounded on anterior border to $\frac{3}{4}$ hindmargin and denticulate twice or thrice on posterior border (and not touching hindmargin) to opposite $\frac{2}{3}$ hindmargin; a dark lunular mark obliquely from inner margin of anal angle is faintly connected with this outer fascia; a row of dark fuscous or black dots on hindmargin: cilia ochreous. Hindwings white; cilia white.

Near Brisbane; in scrub.

Dr. Turner took a specimen in excellent order. I had previously taken two or three rubbed specimens. Much more richly marked than the other species.

5. *NUDARIA MACILENTA*, sp.nov.

♂. 14 mm. Head white, face black, orbital rims white. Palpi black. Antennæ fuscous. Thorax white, posteriorly a dorsal spot black. Abdomen ochreous-grey. Forewings with costa gently rounded, hindmargin obliquely rounded, white with scattered grey scales and fuscous markings and veins grey; a fuscous line of dots at $\frac{1}{5}$, $\frac{2}{5}$, $\frac{3}{4}$ and $\frac{4}{5}$ costa, a light inconspicuous grey fascia from 1st dot to submedian vein near base; three light grey linear dots subtending veins in a line from 3rd costal dot to $\frac{1}{4}$ inner margin; a fuscous outline mark resembling an erect skeleton of a bird from below median to before $\frac{3}{4}$ inner margin; a dentate mark below median at $\frac{5}{6}$; a row of faint hindmarginal fuscous dots: cilia white. Hindwings white; cilia as forewings. Brisbane; one specimen.

Family PSYCHIDÆ.

OECETICUS BICOLOR, sp.nov.

♂. 26 mm. Head, thorax and abdomen ferruginous-ochreous. Antennæ black, midrib white, pectinations narrowing at base and apex. Forewings with costa gently rounded, hindmargin rounded, light ochreous-drab or mouse-colour, thinly scaled, veins darker: cilia darker or more a fuscous-drab. Hindwings as forewings.

Victoria.

An unpretentious-looking insect, the centre ferruginous-ochreous being the more conspicuous because of the sombre-looking wings.

Family BOMBYCIDÆ.

BOMBYX CRENULATA, sp.nov.

♂. 34-38, ♀. 60 mm. Head, thorax and abdomen dark chocolate, in ♀ the thorax lighter, chocolate-fuscous. Palpi dark chocolate, tipped with ferrous-fuscous, in ♀ light chocolate-fuscous. Antennæ reddish-ochreous, midrib fuscous-red, in ♀ pectinations very short, serrate-like. Forewings with costa nearly straight, rounded at apex, hindmargin nearly straight, finely crenulate, dark chocolate with darker-coloured veins; a small black discal

spot at $\frac{2}{5}$ near median, scarcely traceable or absent in ♀, a darker fine hindmarginal line in ♂, ochreous between crenulations in ♀ : cilia alternately chocolate and ochreous. Hindwings dark chocolate, very hairy over inner margin ; cilia chocolate.

The ♀ in general appearance is a lighter chocolate or more a chocolate-fuscous. The moth especially reminds one of the small Lappet moth of England.

Eltham, Melbourne ; one specimen without the black discal spot ; taken by the late Mr. David Kershaw : Brisbane ; three specimens at light.

Family LIPARIDÆ.

DARALA SERRANOTATA, sp.nov.

♀. 63-67 mm. Head, thorax and abdomen light ferrous-ochreous. Antennæ smoky-black, ferrous-ochreous at base. Legs black, densely padded with chocolate-ochreous hairs. Forewings triangular, widely dilate, costa nearly straight, apical third rounded, hindmargin gently rounded, light chocolate-ochreous, semi-hyaline, veins darker chocolate, costal band and base of wings ferrous-ochreous ; an ochreous-white discal spot beneath costal band at $\frac{2}{5}$, an ochreous-white serrate fascia at $\frac{7}{8}$ parallel with hindmargin ; hindmargin beyond this covered with darker chocolate scales, not hyaline : cilia ochreous-white. Hindwings as forewings with serrate fascia continuous with that of forewings ; cilia as forewings.

Barnard Island ; one specimen reared by Mr. Barnard : near Cairns ; one specimen in Brisbane Museum.

Group GEOMETRIDÆ, Family GEOMETRIDÆ.

IODIS FASCINANS, sp.nov.

♂. 35 mm. Head glaucous-green, face bordered with white. Palpi fuscous spotted and tipped with white. Antennæ fuscous. Thorax glaucous-green, irrorated with white hairs, and with a dorsal diamond-shaped white patch posteriorly, containing four green dots ; undersurface white, with a fringe of long white hairs. Abdomen white, irrorated with green, each segment bordered

with green lines posteriorly and laterally, and with two green lines dorsally diverging posteriorly in each segment, apical segment green with a fine central line of white and bordered with white; undersurface white. Legs white, anterior tibiæ green, sparingly barred with white. Forewings rather broadly dilate, costa rounded, hindmargin waved, gently rounded, glaucous-green, thinly scaled, with darker green veins and white dots on the veins; costal band dark green, sparingly dotted with white in apical half, basal third of wings whitened by numerous irregular broken white lines, dots and patches, a white wavy line, thrice broadly dentate from $\frac{2}{5}$ costa to $\frac{1}{2}$ inner margin, a white patch in costal third immediately beyond, an interrupted white fascia, formed of three broad wavy dentate lines or bars partially interrupted immediately below apex, and thinned out to lines and dots on anal third, a hindmarginal interrupted black dentate line, with dots on inner and outer angles: cilia glaucous-green, tinted with darker green and sparingly with white. Hindwings as forewings, with basal white predominating as far as $\frac{2}{5}$ costa to $\frac{3}{5}$ inner margin, inner margin strongly irrorated with green, at apical angle a blotch of rose colour with a white spot bordered with black on inner border of costa, the black extending as a line along hindmargin and thence suffused, the blotch bordered by white; beyond this rose-coloured patch on hindmargin an equal-sized band of ground colour, then a conspicuous patch of white, formed of three wavy white bands, and again a patch of ground colour at anal angle; hindmarginal line and cilia as forewings.

Brisbane; one specimen (Mr. Illidge), October, 1892.

Iodis eucalypti, Luc. Mr. Meyrick has kindly compared with *I. metaspila*, Walk., in British Museum, and he pronounces them the same, consequently the former name must lapse.

Family MONOCTENIADÆ.

ARRHODIA (?) ILLIDGEI, sp.nov.

♂. 37 mm. Head light creamy-fuscous, suffused with rose, forehead yellow, face light ochreous-fuscous with black scales.

Palpi fuscous. Antennæ yellow, pectinations fuscous. Thorax light creamy-fuscous, tinted with rose colour anteriorly, with a dense development of grey-white hairs beneath. Abdomen creamy-fuscous. Legs fuscous, femora and tibiæ crimson-red, striped and annulated with ochreous-yellow. Forewings triangular, costa sparingly sinuous, apex produced, rounded; hindmargin obliquely rounded, light creamy or ochreous-fuscous with a scarcely perceptible rosy tint, and sparsely lightly and thinly pencilled with black, darker and more conspicuous at apical and anal angles; costal margin reddish-yellow, a row of three smoke-coloured dots, first at $\frac{1}{2}$ costa, this slightly diffused, second on median at $\frac{1}{3}$, and third opposite $\frac{1}{3}$ of inner margin; a semilunar black spot on costa at $\frac{2}{3}$; a row of small black dots on veins from opposite $\frac{2}{3}$ inner margin to near the apex of a fuscous fascia formed of interrupted dots or blotches from opposite inner margin at $\frac{3}{4}$ to costa just before apex, the blotch near inner margin large, diffused and bordered with fuscous or reddish-black and suffused with rose colour, the next spot smaller, the centre ones smallest, but the spots again become larger toward costa, where there is a rosy suffusion filling the apical angle, and with a dark spot on hindmargin near apex: cilia dark ochreous-fuscous. Undersurface of forewings greenish-ochreous-fuscous finely pencilled with black, apex rosy dotted with white, inner margin rose-tinted. Hindwings light ochreous-fuscous sparsely pencilled with fine black congregated chiefly throughout middle third of wing; costa rosy; cilia as forewings.

Brisbane (Mr. Illidge), October, 1892.

This also comes near to *Gastrophora*, and will, I think, have to be formed into a new genus.

Group NOCTUINA, Family AGARISTIDÆ.

AGARISTA FLUITANS, sp.nov.

♀. 35 mm. Head grey, face ashy-grey, with a triangular patch on crown and a spot adjacent to orbit on either side rich velvety black. Palpi black, ashy-grey at base. Antennæ black. Thorax

fuscous-black, with an inconspicuous linear ochreous fringe behind collar. Abdomen black, segments bordered with golden-yellow, caudal segment tipped with black. Legs black-grey, banded with white. Forewings triangular, moderately dilate, costa nearly straight, hindmargin rounded, rich fuscous-black, with a few scattered inconspicuous grey scales and a conspicuous curving undulating white fascia from $\frac{3}{5}$ costa to anal angle, resembling a rivulet with an arm or slight angular projection on anterior border at $\frac{1}{2}$, and one on posterior border at $\frac{4}{5}$: cilia fuscous-black. Hindwings dark black; cilia black shaded with grey.

Brisbane; one specimen at light, November, 1892.

Family LEUCANIDÆ.

LEUCANIA EXARANS, sp.nov.

♂♀. 27-30 mm. Head, palpi, antennæ, thorax and abdomen light wainscoat or light ochreous-fuscous. Forewings elongate, narrowly dilate, costa gently rounded, hindmargin rounded; light ochreous-fuscous, veins lighter ochreous, a deep black line from base below submedian to nearly $\frac{1}{2}$ length of wing, where it breaks up into a few inconspicuous scattered black specks; a 2nd and narrower black line commencing at $\frac{1}{3}$ of wing running parallel to median, then dividing into smoky shaded lines between veins; a hindmarginal row of black dots and a narrow hindmarginal light ochreous line: cilia ochreous-fuscous shaded or banded with smoky-grey. Hindwings ochreous-fuscous shaded with diffused smoky-black, darker toward hind border; veins smoky-fuscous; cilia ochreous banded and edged with grey.

Williamstown, Melbourne; three specimens.

LEUCANIA OBUMBRATA, sp.nov.

♀. 32 mm. Head, palpi, thorax and abdomen dusky ochreous very finely speckled with smoky-fuscous; undersurface of thorax with a woolly cushion of long hairs. Antennæ dusky ochreous. Legs dusky ochreous, anterior and middle tibiæ banded with ferrous-fuscous. Forewings with costa gently rounded, hind-

margin rounded, dusky ochreous very finely dusted with smoky-grey and a number of smoke-coloured dots; a row of three smoke-coloured dots, one on costa at $\frac{1}{4}$, the other two at equal distances between this and inner margin at $\frac{1}{4}$, a dot on costa at $\frac{3}{5}$, a row of eight dots from near costa at $\frac{3}{4}$ to $\frac{3}{4}$ of inner margin; a hindmarginal lighter groundcolour line bounded anteriorly by a row of minute dots and posteriorly by a band finely barred with short smoky-fuscous lines: cilia ochreous. Hindwings dusky ochreous; cilia light ochreous with a smoky-fuscous band. On the undersurface the forewings are ochreous, finely dusted with smoky-fuscous, with a smoky-fuscous suffused median line terminated by a broad smoky-fuscous band at $\frac{2}{3}$. The undersurface of the hindwings is as in forewings, the broad band being continuous with that of forewings; there is also a very conspicuous smoky-fuscous discal spot.

Melbourne; one specimen.

CALAMIA SUFFUSA, sp. nov.

♂. 38 mm. Head ochreous-fuscous, eyes chocolate colour. Palpi darker fuscous at base and tips, shaded to ochreous in centre. Antennæ ochreous-fuscous. Legs darker fuscous, ochreous on undersurface. Thorax ochreous-fuscous, becoming darker posteriorly. Abdomen ochreous-fuscous, with a darker fuscous blotch anteriorly on dorsum of 1st segment, and narrow blotches laterally on hind segments. Forewings with costa gently rounded, hindmargin rounded, ochreous-fuscous; veins prominent, finely lined with light ochreous, sharply bordered with red-ochreous, which is suffused to borders of interspaces; costa finely lined with ochreous: cilia fuscous, margined with ochreous. Hindwings ochreous-fuscous, lighter toward inner margin, veins finely lined with light ochreous, bordered and suffused over interspaces with smoky-fuscous; cilia light ochreous, suffused toward apex with darker fuscous. The undersurface of the forewings is dark smoky-fuscous, excepting a narrow median band and a narrow bordering which are ochreous; ciliary band smoky-fuscous. The undersurface of the hindwings is very light ochreous, and is dusted with fuscous over

outer $\frac{2}{3}$ of wing, with a streak of fuscous along inner marginal fold.

Frankston, near Melbourne; one specimen at dusk on *Casuarina* flowers, in April.

Family ORTHOSIDÆ.

ORTHOSIA COLUMBARIS, sp.nov.

♂♀. 33-38 mm. Head, palpi, antennæ, thorax and abdomen creamy-grey. Forewings with costa rounded at base, thence straight, hindmargin rounded, creamy-grey, costal fourth lighter grey, space between this and hindmargin diffused with orange-red, a triangle of three black dots on costa near base and at equal distances on costal side of median vein; a circular line of four black dots on costa at $\frac{1}{3}$, before median, and on median and submedian veins, an oblique line of four black dots from $\frac{2}{3}$ costa to submedian vein, a prominent rhomboidal discal spot between the 2nd and 3rd, a circular line of six or seven black dots on veins from opposite costa at $\frac{3}{4}$ to near hindmargin at $\frac{3}{4}$; the orange-red suffusion forming an irregular boundary line across the wing at $\frac{5}{8}$ and there becoming darker red interspersed with black, beyond it a very light cream-coloured band with terminal line of black dots, and contrasting in colour with the cilia, which are dark red, shading on either border to ochreous-red. Hindwings creamy-white, shaded with smoky-grey towards hindmargin; cilia white.

Frankston, near Melbourne; on *Casuarina* flowers at dusk, March and April, 1886.

Family POLYDESMIDÆ.

PANTYDIA CAPISTRATA, sp.nov.

♂♀. 43-48 mm. Head drab-grey. Palpi dark grey. Antennæ drab-grey. Thorax blue or iron-grey, sparingly dusted with black, and *with a rich black velvety collar*. Abdomen blue or iron-grey, freely covered anteriorly with fringing drab-grey hairs. Forewings with costa gently rounded, hindmargin rounded narrowly scalloped,

blue or iron-grey freely dusted with black; a lighter discal shade at $\frac{1}{2}$ approaching costa, more or less conspicuous; in some specimens a small velvety black dot at $\frac{1}{3}$ near inner margin; a fine ochreous line $\frac{1}{5}$ costa to $\frac{5}{6}$ inner margin, bordered anteriorly by a smoke-coloured band shading into groundcolour, and bounded posteriorly by a reddish band, in a few specimens conspicuously spotted with black; a narrowly scalloped ochreous terminal line bordered with black and smoky-grey: cilia drab-grey, bordered with smoky-grey. Hindwings reddish-fuscous, with a lighter diffused band at $\frac{2}{3}$ dividing off a smoky-black hind border; cilia reddish-fuscous, faintly lined with grey.

Brisbane.

Allied to *P. Diemeni*, Gn., but larger, less variable, with fewer markings, and easily known by the rich black collar.

Family PALINDIIDÆ.

HOMODES VIOLACEA, sp.nov.

♀. 14 mm. Head and thorax creamy-grey tinted with a violet hue. Palpi fuscous. Antennæ ochreous-grey. Abdomen creamy-grey anteriorly tinted with violet, posterior segments broadly based with fuscous-grey. Forewings triangular, broadly dilate, costa nearly straight, hindmargin slightly scalloped before middle, prominently rounded beyond middle and thence obliquely straight to anal angle; creamy-grey with darker shades and markings of grey, and tinted with a violet hue; costal and hindmarginal line continuous, deep fuscous-red; a dot at $\frac{1}{4}$ costa, and another immediately beyond darker grey; a median diffused grey fascia with its anterior border darker fuscous-grey, with a black discal spot, and with its posterior border edged by a sinuous denticulate fuscous-grey line suffusing into a creamy-violet hue; a suffused blotch of grey at $\frac{1}{3}$ and a second larger suffused blotch at anal angle of hindmargin: cilia fuscous-red. Hindwings as forewings, with a fuscous-grey fascia from before $\frac{1}{2}$ costa to $\frac{1}{3}$ inner margin, divided into two lines in costal half by patch of groundcolour; a second linear denticulate fascia from $\frac{3}{4}$ costa to $\frac{2}{3}$ inner margin; a

faint line immediately beyond, and a diffused hindmarginal fascia of same colour; hindmarginal line and cilia as forewings.

Brisbane; one specimen at light.

This is allied to *H. oblatoria*, Walk.

HOMODES OBLATORIA, Walk.

The larva of this offers a curious example of mimicry. Seen on the fence feeding, it appears like that of *Iodis insperata*, Walk., or *I. pieroides*, Walk. It has a number of flattened out projections spreading out from each side of the back, of various shades of green and grey. On touching the larva these collapse, being only appendages of lichen and spores glued on to the creature's skin in a tower-built fashion. The larva is yellowish-green and simulates a *Pyrale* larva in appearance. The lichen cannot be detached at the skin. The chrysalis is spun in an eggcup-shaped cocoon of lichen. Feeds on lichen.

Brisbane.

Family HEMICERIDÆ.

WESTERMANNIA OCELLATA, sp. nov.

♂♀. 22-26 mm. Head ashy-grey, sprinkled with dark fuscous, face fuscous. Palpi fuscous. Antennæ fuscous, becoming white at the base. Thorax ashy-grey, sprinkled freely with fuscous. Abdomen light fuscous-ochreous. Forewings with costa nearly straight, hindmargin gently rounded, ashy-grey irrorated with various shades of grey, fuscous and ferrous scales; three fuscous black stripes on costa, at $\frac{2}{5}$, $\frac{2}{3}$ and $\frac{4}{5}$, the latter diffused; an indistinct wavy line from first costal stripe passes obliquely to middle of wing at $\frac{1}{2}$ where it is recurved almost at a right angle to $\frac{1}{2}$ inner margin, a more distinct line, interruptedly black, from second costal stripe, runs obliquely half way to hindmargin, is there parallel with second fourth of hindmargin and then is sinuated along and below median fold to a point opposite first line, thence sharply to inner margin at $\frac{2}{3}$, the space enclosed by the inner half of these two lines deeply coloured with fuscous and black, forming a conspicuous blotch on hindmargin, finely outlined by black,

bordered with grey-white; a grey denticulate inconspicuous fascia more or less diffused between this and the hindmargin, and an interrupted hindmarginal line of black dots: cilia fuscous, banded with darker fuscous. Hindwings light fuscous-ochreous, with a diffused dark fuscous hindmarginal border; cilia ochreous, barred with fuscous.

Brisbane; rare.

Family GONOPTERIDÆ.

ANOMIS (GONITIS) DEFINATA, sp.nov.

♂♀. 28-30 mm. Head, palpi, antennæ, thorax and abdomen ochreous-drab. Forewings with costa wavy, apex rounded, acute, hindmargin sinuous, produced to angular projection in middle, light ochreous-drab, with dark fuscous lines, and dusted with dark specks, and crossed by numerous short dark strigulæ; a short line close to base; a 2nd line from $\frac{1}{3}$ costa, obliquely to $\frac{1}{3}$ median vein, thence at an angle to $\frac{1}{3}$ inner margin; a third line from beyond $\frac{1}{2}$ costa extends to median vein; a fourth line from $\frac{3}{4}$ costa obliquely for a short distance, then bows outward rounding to median vein and thence straight to $\frac{2}{3}$ inner margin; a fifth line from $\frac{7}{8}$ costa runs parallel with hindmargin to $\frac{7}{8}$ inner margin, and is diffused anteriorly with fuscous shading into ground colour; a dark hindmarginal line: cilia ochreous, fuscous at base. Hindwings reddish-ochreous, lighter ochreous towards base, a dark hindmarginal line; cilia creamy-ochreous.

Geraldton; (Messrs. Meek and Barnard).

Allied to *A. dyima*, Meyr., but differs in colour and markings, and has 4th line bowed and straight, which in *A. dyima* is like a \perp .

Family CATEPHIIDÆ.

MELIPOTIS COLLUSTRANS, sp.nov.

♂♀. 36♂-48♀ mm. Head fuscous more or less mottled with darker fuscous and drab. Palpi with second joint squamose, fuscous barred with ochreous-grey, third joint bar-like, lighter fuscous, with two bands of fuscous-grey. Antennæ fuscous, finely

annulated with fuscous-drab in ♂, scarcely perceptible in ♀. Thorax rich fuscous mottled with ochreous and fuscous-grey, darker on sides than on dorsum. Abdomen rich fuscous, basal segment covered with fringe of black, three or four segments fringed with fine whitish hairs. Legs with the femora pilose, ochreous-fuscous, the tibiæ laxly clothed, fuscous-black, the tarsi fuscous-black tipped at each joint with ochreous-fuscous. Forewings with costa nearly straight, hindmargin rounded, ochreous-fuscous mottled with shades of fuscous and black, costa irrorated more or less with ochreous lines and black, a rich black angular curved line at base half across wing, a second from $\frac{1}{4}$ costa to vein 1 opposite to $\frac{1}{3}$ inner margin, thrice dentate, space enclosed between this and basal line more or less filled with rich black, dashed with fuscous and ochreous; a third black sinuous denticulate circular line from $\frac{2}{5}$ costa running for $\frac{2}{3}$ parallel to hindmargin, curving outward toward anal angle to vein 1, and again obliquely turning to $\frac{3}{4}$ inner margin; the space between this and the 2nd line more ochreous in ♂, a black triangle in the centre across vein 2, giving off an arm on either side quickly becoming inconspicuous, an ill-defined reniform spot on basal or anterior arm; a fourth line from apex running obliquely for $\frac{1}{10}$ of wing and then parallel to hindmargin, sharply turning to anal angle, ochreous bordered on either side with black, and in some specimens shot with blue, the space between this and the third line in some specimens mottled with black, a darker lunar patch filling the costal third, and a short black line running along the centre, a blue shading, in others a whitish shading on outer $\frac{2}{3}$ of inner margin; in the ♀ the space beyond the fourth line, the hindmarginal $\frac{1}{6}$ and inner marginal $\frac{1}{4}$ ochreous-fuscous, the remainder of the costal portion of the wing almost covered with black: cilia fuscous-black. Hindwings black, with ochreous-fuscous towards base, an oval white blotch in centre of wing, a narrow white band just before apex, and another just before anal angle of hindmargin; cilia black, white or fuscous-grey.

Geraldton (Messrs. Meek and Barnard).

Allied to *M. pannosa*, Moore.

Family OPHIDERIDÆ.

OTHEREIS (OPHIDERES) IRIDESCENS, sp. nov.

♂. 65 mm. Crown of head golden-yellow, forehead purple-fuscous, face vermilion-orange. Palpi with second joint squamose, orange-yellow on inner side, purplish-fuscous on outer side, with a line of blue in centre, and narrowly bordered with fuscous-yellow at base; third joint narrowly club-shaped, fuscous, club fuscous-black tipped with yellow. Antennæ fuscous-grey. Thorax fuscous, with a yellow collar, divided into three by a vermilion band, narrowed on dorsum, posteriorly orange-yellow. Abdomen yellow, with long orange hairs, caudal segment fuscous-black, lighter at tip. Legs fuscous, anterior tibiæ with a rich yellow dot near centre, and with long fuscous and yellow hairs. Forewings triangular, costa rounded, hindmargin gently and obliquely rounded, inner margin sinuous; fuscous with lighter and darker shades and marblings, tinted with blue-grey and ochreous, and pencilled with lines of darker fuscous; a rich chocolate band from costa just beyond base to vein 1, a second like band from $\frac{1}{4}$ costa to vein 1 at $\frac{1}{6}$, bordered posteriorly by an ochreous-fuscous line, a 3rd line less conspicuous from before $\frac{1}{2}$ costa to near inner margin at $\frac{2}{5}$; a discoidal oval blotch having anterior half fuscous edged with fuscous-black, and posterior half ochreous-fuscous, suffused posteriorly into groundcolour; a light ochreous-fuscous line from $\frac{3}{4}$ costa, parallel to hindmargin for $\frac{1}{2}$ distance, where it curves inward to vein 2, and thence is bent obliquely to inner border at $\frac{1}{2}$, broadly dilate at costa and narrowing to inner margin, bordered posteriorly with a line of rich black; a broad hindmarginal band of blue-grey narrowing to anal angle, diffused with ochreous on anterior border, and subtended by a fuscous band $\frac{2}{3}$ toward hindmargin: cilia blue-grey. Hindwings orange-red, with a deep rich black border, half the depth of wing on costa and narrowing to a point on anal angle; cilia grey-black.

Geraldton (Messrs. Meek and Barnard).

RHYTIA (OPHIDERES) CREPIDOLATA, sp.nov.

♂. 60 mm. Head ochreous, forehead with slaty-grey tuft. Palpi slaty-grey, 2nd joint with greyish-ochreous lines on outer and inner sides, third joint with broad clavate tufted top tipped with black. Antennæ ochreous-fuscous. Thorax with anterior part and patagia ashy-grey, posterior portion darker grey mixed with black. Abdomen yellow or brick colour, caudal appendage black. Legs olive-fuscous, anterior tibiæ with a white dot on upper surface and a pad of hairs on undersurface, orange at root, olive-fuscous in spread out pad. Forewings with costa rounded, apex acute, hindmargin rounded, convex, inner margin rounded in a prominent projection on basal $\frac{2}{5}$; green-bronze, correlated with creamy-ochreous, and crossed by numerous sinuous dark bronzy-green lines; a dark line from $\frac{1}{4}$ costa to just before $\frac{1}{4}$ inner margin, bordered posteriorly by a creamy-ochreous line suffused in a light lunar patch; a median bronzy-green fascia suffused on anterior border into the light lunar patch, posterior border from $\frac{1}{3}$ costa obliquely to middle of wing, thence at an angle to inner margin at $\frac{1}{2}$, bordered by a suffusion of creamy-ochreous, shaded on costal portion by light bronzy-green; a diffused bronzy-green fascia with anterior border sharply defined from $\frac{2}{5}$ inner margin obliquely toward apex but rounded just before costa to $\frac{3}{4}$ costa, posterior border less sharply defined from apex, indistinctly parallel with hindborder to anal angle, more or less shaded on inner portion into ochreous or creamy-grey, a patch of bronzy-green on hindmargin, diffused into a line at $\frac{3}{5}$; cilia grey tinted with bronze. Hindwings yellow or brick colour with a deep black border, $\frac{3}{5}$ depth of costa sinuous and irregularly and slightly prolonged at points on anterior border narrowing to one-third the depth at anal angle; a white ciliary row of lunular spots.

Geraldton (Messrs. Meek and Barnard).

Allied to *R. Hypermnestra*, Cramer.

Family HOMOPTERIDÆ.

GIRPA (HULODES) INANGULATA, Gn.

Queensland generally.

GIRPA (HULODES) ERIOPHORA, Gn.

Geraldton (Messrs. Meek and Barnard).

GIRPA (HULODES) PERTENDENS, Walk.

Queensland generally.

GIRPA (HULODES) FRATERNA, Moore.

Geraldton (Messrs. Meek and Barnard).

I believe the above to be varieties of one species. The whole occurring in Queensland as in India seems to confirm this opinion, while in a large number we meet with every intermediate form. If this view be correct, all the species except *G. inangulata*, Gn., must drop.

ANODAPHA BOARMOIDES, Gn.

Brisbane; also in Ceylon.

Family PHYLLODIDÆ.

AGONISTA MEEKII, sp. nov.

♂♀. 50-58 mm. Head, antennæ, palpi, thorax and abdomen ochreous-fuscous or fuscous-drab. Forewings triangular, broadly dilate, costa straight, apical third rounded, apex acute, hindmargin obliquely rounded, fuscous-drab, cinereous-drab or ochreous-fuscous, thickly dusted with black; a black fascia diffused like an ink-blot from $\frac{1}{4}$ costa to $\frac{1}{4}$ inner margin, a second immediately beyond, a third extending as a diffused smoky-fuscous band from costa at $\frac{3}{5}$ to $\frac{5}{5}$ to inner margin, from $\frac{3}{4}$ to anal angle, with three or four darker bands crossing; a fourth and dark black linear straight

band from $\frac{1}{3}$ costa to just before anal angle on inner margin, bordered with ochreous on anterior border and smoky diffusion on posterior border; two ochreous dots near base and a black dot at $\frac{3}{4}$ of vein 6, a series of black dots along vein 2, in some specimens a smoky diffusion at apex, with a black patch against 4th band and diffused patches along same band near inner margin; a lighter space beyond this leaves a lunular-shaped hindmarginal dark fascia; the ♀ almost without markings except the fourth band which is more ochreous or fuscous, and the veins which are ochreous; a hindmarginal row of black dots: cilia ochreous-fuscous. Hindwings as forewings, with a black fascia at $\frac{1}{2}$, and a broad diffused smoky fascia separated by a lighter ochreous-fuscous space immediately beyond; a line of hindmarginal dots and cilia as in forewings. Markings lighter in ♀.

Geraldton (Messrs. Meek and Barnard).

Allied to *Agonista reducens*, Walker. This species is very variable, but evidently all the specimens belong to one with two or three marked variations.

Family DYSGONIIDÆ.

THYAS REGIA, sp.nov.

♂♀. 75-80 mm. Head and thorax chocolate-fuscous. Palpi stout, reddish-fuscous, third joint in ♂ thick, in ♀ long and rod-like. Antennæ light fuscous, reddish-ochreous on underside, ciliated in ♂. Abdomen orange-red, shaded with fuscous anteriorly. Forewings elongate-triangular, costa gently rounded toward apex, hindmargin waved, convex; dark fuscous with fine black, grey and blue-grey scales, the latter predominating in ♀; a sinuous blue-grey line from $\frac{1}{3}$ costa to $\frac{2}{3}$ inner margin, with a line running from it along submedian to near base, and giving a branch to costa just beyond base; this line in ♂ marked with black; a reniform spot at $\frac{1}{2}$, divided into a costal elongate spot, and a rounded inner circle, blue-grey in ♀, black in ♂; a deep black fascial line from $\frac{3}{5}$ costa to $\frac{3}{4}$ inner margin, in ♀ tinted with

grey-blue on anterior border, and suffused into groundcolour posteriorly; a suffused waved sinuous linear fascia from costa just before apex, to anal angle, concave in centre: cilia black tinted with fuscous-grey. Hindwings orange-red, with a black hindmarginal border, irregular and prolonged along veins on anterior border, suffused with orange-red on posterior border, and toward $\frac{3}{4}$ of hindmargin, where the black tint is diffused along submedian vein to near base; cilia orange-red varied with black and grey.

Geraldton, Johnson River (Messrs. Meek and Barnard).

Allied to *T. coronata*, Fabr.

Family THERMESIIDÆ.

SYMPIS PARKERI, sp.nov.

♂♀. 38-42 mm. Head vermilion-fuscous, crown with a white or ochreous lunar mark; face variegated with white. Palpi fuscous, variegated with white or ochreous. Antennæ fuscous, whiter toward extremity. Thorax vermilion-fuscous. Abdomen fuscous or fuscous-grey, segments bordered with lighter grey. Forewings elongate-triangular, costa slightly waved, hindmargin nearly straight, vermilion with fuscous tint, and shaded by fuscous and lines of darker fuscous; a fuscous dot at base on median, and a faint row of dots along median, a small black discal spot at $\frac{1}{3}$, nearer costa; a wavy denticulate border at $\frac{3}{7}$ marking off the outer fuscous half of wing, crossed near its anterior border by two interrupted fine black lines, in its centre by three small vermilion dots or by four larger dots closely approximate, and by a submarginal white suffused line; hindmarginal line fuscous: cilia fuscous barred with white. Hindwings vermilion or vermilion-grey at base, and banded by fuscous, by a white or bluish-grey fascia and again by darker fuscous or blue-black from within outwards, a submarginal whitish shade in middle third and a hindmarginal dark fuscous line; cilia white on inner border, fuscous near apex, white and grey in median expanse.

Brisbane, at Glen Retreat Orangery (Mr. Parker); a second taken at a lamp.

Allied to *S. rufibasis*, Guénee, from India.

SONAGARA SCITARIA, Walk.

A variety of this, yet not sufficiently distinct to make into another species, was taken by Messrs. Meek and Barnard at Geraldton.

SENERATIA PRÆCIPUA, Walk.

Geraldton, Johnson River (Messrs. Meek and Barnard); also taken in Ceylon.

SENERATIA BARNARDI, sp. nov.

♂♀. 30-33 mm. Head fuscous. Palpi fuscous, black on upper side of 2nd segment. Antennæ fuscous-ochreous. Thorax fuscous, violet anteriorly, collar ochreous-fuscous. Abdomen fuscous, tinted with black, caudal appendage in ♂ ochreous. Legs dark fuscous, tarsi with ochreous spots. Forewings triangular, moderately dilate, costa slightly wavy, nearly straight, hindmargin obliquely rounded, ochreous-fuscous, darkened by a tint of violet and by shadings of darker fuscous and black; a crenate dark fuscous line from $\frac{1}{5}$ costa to $\frac{1}{5}$ inner margin; a median dark fuscous fascia darkened with black, anterior border straight just before $\frac{1}{2}$ costa to just before $\frac{1}{2}$ inner margin, anterior portion of fascia dark and black, posteriorly diffused to posterior border, which is a crenate circular line from $\frac{3}{5}$ costa to $\frac{4}{5}$ inner margin, a black discal spot near centre of fascia; beyond this is another similar line but less conspicuous, a hindmarginal row of black dots; in some specimens the veins are ochreous-fuscous, in others darker: cilia fuscous-grey. Hindwings with colour and markings as in forewings; 1st line obsolete, median band darker anteriorly, diffused posteriorly, 3rd line bordered by an ochreous shading, and beyond it another inconspicuous fuscous line; cilia fuscous-grey with ochreous basal line.

Geraldton, Johnson River (Messrs. Meek and Barnard).



Differs from *S. precipua* in being only $\frac{2}{3}$ size, and in having head and palpi fuscous to black instead of chocolate-ochreous; the wings are blacker, and the whole insect has not the violet so diffused as in *S. precipua*, while the markings are different and less conspicuous in relief.

Family ENNOMIADÆ.

LAGYRA FLACCIDA, sp.nov.

♂. 30 mm, ♀. 36-52 mm. Head, palpi, thorax, and abdomen black tinted with violet-grey. Antennæ black, pectinations in ♂ grey. Forewings triangular, broadly dilate, costa rounded, apex rounded and prolonged, hindmargin deeply scooped out beneath apex, thence rounded and slightly crenulate; violet-slate coloured and banded with black; in ♂ rather a blue-grey or a violet diffused with ochreous; a darker broad black band at base; a broad band immediately beyond posterior border from $\frac{1}{3}$ costa to $\frac{1}{4}$ inner margin, bowed in costal half; a conspicuous broad median fascia, darker on either border, occupying the third fourth of the wing, posterior border rounded in centre, waved, a submarginal line at $\frac{5}{6}$ diffused with shaded black more or less to hindmargin, hindmarginal line deep black: cilia black tipped with grey or white. Hindwings with the colour, markings and fascia as in and continuous with those of forewings; cilia as in forewings.

Geraldton, Johnson River (Messrs. Meek and Barnard).

Allied to *L. Talaca*, Walk.

Family EROSIADÆ.

EROSIA CONSCRIPTA, sp.nov.

♂♀. 14-16 mm. Head ochreous-grey. Palpi light fuscous-grey. Antennæ silvery-grey. Thorax and abdomen light grey. Forewings broadly dilate, costa straight, apex rounded, hindmargin gently rounded, light grey, dusted with fuscous and marked with dark fuscous lines and spots; costa dotted along its entire length; a circular line of dots from $\frac{1}{3}$ costa to $\frac{1}{3}$ inner margin; a second

line from $\frac{2}{3}$ costa arches toward hindmargin, and below median vein is angled as a fine line to a conspicuous blotch on $\frac{2}{3}$ inner margin; a hindmarginal band of interrupted dots and blotches is diffused into two thin lines on inner half of wing: cilia grey. Hindwings as forewings, hindmargin sharply angled below apex and before middle; a row of dots along inner border; a second row parallel and along submedian; a wide V rests near costa at $\frac{1}{3}$ and touches costa at $\frac{2}{3}$, apex being produced along median vein; between this and anal angle a conspicuous angular blotch, and beyond it toward hindmargin an arrow-head line, subtending a crenate black hindmarginal line; cilia as in forewings.

Geraldton (Messrs. Meek and Barnard).

Conspicuous by its hieroglyph on hindwings; allied to *E. stolidus*, Butler.

Group PYRALIDIDÆ, Family EPIPASCHIADÆ.

STERICTA ÆRUGINOSA, sp. nov.

♀. 23 mm. Head, palpi and thorax coppery-green freely dotted with grey and greenish-black, thorax anteriorly tinted with copper-red. Antennæ greenish-fuscous. Abdomen fuscous-grey, segments divided by copper-fuscous dorsal lines which in middle segments become broken into a central dot and suffusion on either side. Forewings oblong-obovate, costa nearly straight, apical half gently rounded, apex scarcely pointed, hindmargin gently rounded, bright copper-green freely marbled and irrorated with lighter and dark greens and shades of fuscous, and containing a large triangular patch from a base $\frac{1}{3}$ to anal angle of inner margin to an apex at $\frac{2}{3}$ costa of copper-red freely marbled with dark green and fuscous, veins lighter green; a black-green dot near base, and continuous with a line of black-green dots more or less suffused, along median vein to $\frac{1}{3}$, thence as a shading more or less distinct along median to hindmargin; a black-green dot at $\frac{1}{3}$ costa reaching but scarcely touching median; a black-green line from $\frac{1}{3}$ costa to $\frac{1}{3}$ inner margin, twice deeply dentated outward in costal half; a black-green band bordering inner margin to $\frac{1}{2}$, thence bending at an

obtuse angle and continued until it meets the transverse bar just before costa; a dark green spot at $\frac{2}{3}$ costa breaking up into two bands, the anterior reaching to $\frac{3}{4}$ inner margin and crossed in the middle by a diffused black-green blotch bordered with copper-red, the posterior branch very denticulate, and extending to $\frac{3}{4}$ hindmargin; it is bordered by a light green on either side and suffused into a coppery patch at and filling the whole anal angle; a hindmarginal row of black-green dots, barred by a shading of copper-fuscous: cilia copper-fuscous banded and barred with fuscous. Hindwings fuscous, with darker fuscous on veins and darker towards hindmargin but scarcely forming a hindmarginal band; cilia copper-red tinted with pink and barred and banded with fuscous.

Brisbane; a pair bred by Mr. Illidge in 1892.

Family PYRALIDÆ.

BALANOTIS FERRUGINEA, sp. nov.

♂. 39 mm. Head iron-grey, eyes green, black in posterior lower third. Palpi iron-grey. Antennæ grey, very finely lined with black and white, cilia grey. Thorax grey, richly variegated with white and black, three white spots on either side of central line of dorsum, collar iron-grey, a brush of long ochreous hair spreading out from underside from fore part of thorax. Abdomen black, base variegated with white, segments narrowly and sparingly based with white at sides, caudal appendage ochreous, extreme point black. Legs iron-grey, tibiæ and tarsi lined with ochreous-white. Forewings elongate, narrowly dilate, costa slightly wavy, hindmargin rounded, fuscous, marbled with shades of fuscous-black and grey; a black linear fascia from $\frac{2}{5}$ costa to $\frac{1}{3}$ inner margin; costal half of wing for $\frac{1}{3}$ of depth black; a conspicuous apical patch marbled black and fuscous; spots on inner margin and a diffused arch of spots in middle third of inner margin black and marbled with fuscous; remainder of wing lighter, being more or less marbled with grey and white; hind-

marginal line fuscous-ochreous : cilia fuscous-grey, with a median ochreous line, finely barred with black. Hindwings ferruginous, with a broad hindmarginal black border, narrowing acutely and sharply to a diffused line at $\frac{1}{2}$ hindmargin to just before anal angle ; hindmarginal line fuscous-ochreous ; cilia as in forewings.

Brisbane ; two specimens.

•
SYNTONARCHA VULNERATA, sp.nov.

♂♀. 16-22 mm. Head light ochreous-fuscous, in some specimens ferrous-fuscous on crown. Palpi ferrous-fuscous. Antennæ ochreous to ferrous-fuscous. Thorax ochreous-fuscous, in some specimens stained with ferrous-fuscous or sanguineous. Abdomen ochreous-fuscous, in some specimens ferrous-fuscous anteriorly. Forewings elongate-obovate, costa gently rounded, hindmargin rounded, thinly scaled toward inner margin, so much so as to form a conspicuous semi-hyaline arch, ochreous-fuscous ; this is arched over by a ferrous-fuscous or sanguineous band which covers basal third of inner margin, base of wing, costal band to $\frac{2}{3}$ and thence as an oblique band to anal angle ; a very dark blotch resembling a dried blood stain from inner margin just before $\frac{1}{2}$, more or less obliquely to near, but not touching, costal band ; a dark blotch from anal angle more or less diffused to costa at $\frac{4}{5}$; a small dark discal spot near costal band at $\frac{2}{3}$; in some specimens the veins are dark ferrous-fuscous ; hindmarginal line ferrous-fuscous : cilia pearly-ochreous. Hindwings hyaline, with a hindmarginal narrow line of ferrous-fuscous ; cilia as in forewings.

Brisbane ; at electric light ; very rare.

This species is very variable, chiefly a light form and a dark form according to the development of the ferrous-fuscous scales. It has the appearance on the dark type variety of being smudged with dried up blood stains.

Family HYDROCAMPIDÆ.

PARAPONYX PUDICA, sp.nov.

♂♀. 12-14 mm. Head, palpi and thorax snowy-white. Antennæ white, ochreous toward tips. Abdomen white, base of

segments ochreous. Forewings with costa straight, rounded at base and apex, hindmargin rounded, wavy, snowy-white with ochreous-drab and fuscous lines and suffusions; a circular line near base to near inner margin; a second circular line from $\frac{1}{4}$ costa to $\frac{1}{4}$ inner margin, and continuous over $\frac{2}{3}$ hindwing; a short oblique line from costa at $\frac{1}{2}$, and immediately beneath posterior end a kidney-shaped figure with a white centre and smoky-grey nucleus; a narrow line beneath this to $\frac{1}{2}$ inner margin and through hindwing to $\frac{1}{2}$ inner margin; a triangle at $\frac{3}{4}$ costa, and a broad band immediately beneath; beyond these posteriorly is a line of ground-white sinuous outward toward apex and inward toward inner margin, bordered anteriorly by a light-ochreous-drab line and posteriorly by a darker line, suffused in the pockets; a parallel suffusion of ochreous-drab on hindmargin separated by a similar line of snow-white: cilia white, tinted and mixed with ochreous-drab. Hindwings as forewings, a round discal dot beyond 2nd line; a third line dentate and denticulate; a broad hindmarginal suffusion of ochreous-drab, with a short faint line of white along inner margin to opposite anal angle; cilia as in forewings.

Geraldton (Messrs. Meek and Barnard).

Family BOTYTIDÆ.

GLYPHODES LINEATA, sp. nov.

♂♀. 30-35 mm. Head grey, orbital rims and tongue white. Palpi black, terminal joint light grey. Antennæ ochreous-grey. Thorax chocolate-fuscous, becoming chocolate-black laterally, with seven whitish-grey lines, one on dorsum and three at equal distances on either side. Abdomen chocolate-fuscous, posterior segments vermilion-red tinted with gold, five whitish-grey lines, one on dorsum and two at equal distances on either side, caudal appendage in ♂ black, anal segment of ♀ vermilion-red, narrowly edged with black. Forewings elongate, moderately dilate, costa straight, apical fourth rounded, hindmargin obliquely rounded beyond centre, chocolate-fuscous tinted with velvety-black and

interlined with vermilion-red lines bordered by rich black bands running as a rivulet in and out between and around all markings; a circular white line from costa near base to $\frac{1}{3}$ inner margin; a second immediately beyond diffused with vermilion-red toward inner margin; a 3rd inversely circular to the 1st from $\frac{1}{4}$ costa to $\frac{1}{3}$ inner margin varying in colour from white to red; a triangle of white with its base from $\frac{1}{4}$ costa to immediately beyond, and reaching in ♂ to $\frac{1}{2}$, and in ♀ to $\frac{3}{4}$, across wing toward inner margin, bordered by a linear band of rich velvety chocolate-black; a second and larger triangle of white having its base $\frac{1}{2}$ to near $\frac{3}{4}$ costa, and its apex $\frac{1}{2}$ toward inner margin; between the two triangles a decanter-shaped figure of black lined with blue-grey and bordered with vermilion-red, the figure and triangle being both bordered by the continuous black band; immediately beyond 2nd triangle is a red line passing obliquely to $\frac{3}{4}$ inner margin, bordered posteriorly with a black line edged with white on and near costa and suffused blue-grey toward inner margin; the portion beyond this plain rich groundcolour; an ochreous hindmarginal line: cilia black tipped with silver-grey, a patch for $\frac{1}{3}$ of hindmargin just beyond anal angle silver-white. Hindwings coloured and marked as forewings, with inner margin becoming light ferruginous; a large white triangle in middle third of costa to $\frac{1}{2}$ toward inner margin; two lines of white from near base on costa half-way to hindmargin, where they are diffused into groundcolour; three linear bands of vermilion-red beyond triangle, separated by rich black lining, centre line tinted with blue-grey; a line of white immediately beyond extends through middle of wing; a rich border of dark chocolate-black is edged with hindmarginal ochreous line; cilia as in forewings with a silver-white patch in middle third.

Geraldton, Johnson River (Messrs. Meek and Barnard).

DIPLOTYLA MEEKII, sp.nov.

♂. 19-22 mm. Head fuscous-black, orbital rims ochreous-fuscous. Palpi black. Antennæ fuscous, portion beyond tuft whitish-grey. Thorax fuscous-black. Abdomen fuscous-black,

with a small ochreous spot on præcaudal segment, and caudal segment tipped with light ochreous. Legs fuscous-black, banded with ochreous. Forewings elongate-triangular, costa moderately sinuate, hindmargin rounded, fuscous-black; three crenulate fuscous lines bordered with black, more or less distinctly defined, 1st at $\frac{1}{8}$ costa to $\frac{1}{4}$ inner margin, 2nd more or less interrupted, from near costa at $\frac{3}{5}$ to $\frac{3}{5}$ inner margin, 3rd from $\frac{1}{5}$ costa to $\frac{3}{4}$ hindmargin; a small ochreous dot beyond 1st line near costa, a larger ochreous spot on anterior border of 2nd line near costa; a small light fuscous-ochreous dot on costa at $\frac{3}{4}$; a fine hindmarginal fuscous-ochreous line: cilia black with a median fuscous-ochreous band. Hindwings as forewings, with two faintly marked fuscous-ochreous lines, the first from $\frac{1}{2}$ costa to anal angle, the second from $\frac{7}{8}$ costa parallel with hindmargin as far as $\frac{2}{3}$; cilia as forewings.

Geraldton, Johnson River (Messrs. S. Meek and Barnard).

Allied to *D. ochrosema*, Meyr.

REHIMENA DIVISA, sp.nov.

♂♀. 19-25 mm. Head ochreous-drab, crown streaked with pale lemon. Palpi fuscous-drab. Antennæ fuscous-drab mingled with white toward base. Thorax purple-fuscous, with ochreous over collar, and a grey-white band on dorsum. Abdomen fuscous, with fuscous-grey fringing segments, anal segment tipped with ochreous. Legs purple-fuscous, banded with white. Forewings elongate, moderately dilate, costa nearly straight, hindmargin rounded, purple-fuscous, tinted toward hindmargin with drab scales; a triangle of orange-ochreous dividing wing almost equally and bordered by a black line, posterior border sinuous and dentate; a yellow-ochreous spot at $\frac{7}{8}$ costa, suffused along costa into ground-colour; this subtending a submarginal purple-black line sharply turning to hindmargin just before anal angle; this line dividing off a hindmarginal band which is diffused with creamy-drab between veins; a light hindmarginal fine line with a row of black dots: cilia creamy-grey. Hindwings fuscous-grey, veins darker,

with a lighter ochreous-grey suffusion toward base ; cilia creamy-grey.

Geraldton (Messrs. Meek and Barnard).

Group TINEINÆ, Family XYLORYCTIDÆ.

PILOSTIBES TECTA, sp.nov.

♂♀. 25-28 mm. Head ashy-grey, irrorated with black, face lighter grey. Palpi grey, 2nd joint thickened with dense grey and black scales. Antennæ grey, annulated with black. Thorax ashy-grey, finely irrorated with black, and with a tuft of white hairs fuscous at the base posteriorly on either side. Abdomen light fuscous, very finely irrorated with black. Forewings elongate-oblong, costa moderately arched, apex obtuse, hindmargin gently rounded, slaty-grey, becoming ashy-grey toward base and basal half of costa, finely and profusely pencilled with black, a row of conspicuous black spots on median, 1st near base, 2nd at one-third, and 3rd at two-thirds, a row of three inconspicuous black dots on costa at $\frac{2}{3}$, $\frac{2}{3}$ and $\frac{3}{4}$: cilia slaty-grey with base having a fuscous tint. Hindwings fuscous-grey; cilia light fuscous-grey with darker basal band.

Duaringa (Mr. Barnard).

PILOSTIBES STIGMATIUS, Meyr.

Brisbane ; two specimens, beaten from trees.

CRYPTOPHAGA NUBILA, sp.nov.

♂♀. 30-42 mm. Head, palpi and thorax white. Antennæ white, with fuscous pectinations in ♂, ciliated in ♀. Legs white, posterior tarsi with base of joint black. Abdomen with a red spot on second segment bordered with white; first segment in ♂ grey, but covered with fringe, two tufts of white hairs; in ♀ segment white; hind segments in ♂ grey, thickly diffused with black and ashy-grey; in ♀ light grey bordered with white. Forewings elongate, costa very gently rounded, hindmargin rounded,

grey-white freely irrorated with smoky-black scales, veins smoky-grey; a suffusion of smoky-black all round disc leaving disc a grey-white as groundcolour; a like suffusion on inner border leaving a narrow strip of groundcolour between it and the darker area of the wing; no distinct discal spot: cilia grey, tinted with smoky-grey. Hindwings in ♂ black, darker on veins, inner margin and base white; a row of black spots on veins almost hidden by groundcolour; in ♀ hindwings white diffused with ashy-grey; streaks of white from base in interneural spaces; veins smoky-grey; cilia white with a smoky line in ♂, in ♀ divided into dots.

Brisbane; reared by Mr. Illidge from larvæ taken on Swamp Mahogany (*Tristania suaveolens*).

CRYPTOPHAGA INTERMEDIA, sp.nov.

♂♀. 28-42 mm. Head, palpi and thorax white. Antennæ in ♂ white, pectinations fuscous, in ♀ white at base, thence finely annulated in middle and becoming black at extremities. Legs white, tarsi with black and white rings. Abdomen in ♂ with first segment white, 2nd dull orange-red, middle segments velvety-black edged with white, and posterior segments edged with long white hairs; in ♀ white, second segment dull orange-red. Forewings elongate, costa in ♂ nearly straight, in ♀ rounded, milky-white, with three black spots, 1st near median at $\frac{1}{3}$, 2nd and 3rd at $\frac{2}{3}$, the costal one slightly anterior—in ♀ the median portion of the wing is covered, and the dots are less easily traced, in numerous short black pencillings; a row of black spots on apical fifth and along hindmargin: cilia white, with darker basal band. Hindwings in ♂ black, darker on veins, inner border white variegated with a few grey hairs, in ♀ white, veins smoky-black, and a diffusion of black along veins and over the hindmarginal area of wing, dots on hindmargin in ♀ large and conspicuous, in ♂ almost obscured; cilia white with smoky band at base.

Var. *alba*.

♂. Forewings snow-white, hindwings as type.

♀. Forewings snow-white with three small dots, hindwings pure white.

Brisbane ; reared by Mr. Illidge from larvæ taken on *Tristania suaveolens*.

CRYPTOPHAGA FLAVICOSTA, sp.nov.

♂♀. 28-38 mm. Head ashy-grey. Palpi whitish-grey. Antennæ fuscous, becoming ashy-grey at base. Thorax slaty-grey, becoming ashy-grey anteriorly. Abdomen slaty-grey, posterior segments in ♂ copper-red bordered with rich velvety-black, in ♀ slaty-grey banded with narrow lines of black and fuscous-red. Legs orange-red inclining to ferrous. Forewings elongate, moderate, costa scarcely arched in ♂, slightly arched in ♀, apex obtuse, hindmargin slightly rounded, somewhat oblique, rich slaty-grey, becoming ashy-grey toward basal portion of costa ; an orange-red costal band, more brown-red in ♀ and with a rich black velvety patch in apical angle : cilia slaty-grey, with indistinct fuscous bands. Hindwings fuscous-grey ; cilia as forewings.

Brisbane ; bred by Mr. Illidge in Nov., 1892, from *Eucalyptus eugenioides* and *E. corymbosa*.

CRYPTOPHAGA PORPHYRINELLA, Walk.

Brisbane ; bred from *Exocarpus Cunninghamsi* (?)

CRYPTOPHAGA ECCLESIASTIS, Meyr.

Brisbane ; bred by Mr. Illidge from *Eucalyptus corymbosa*.

XYLORICTA TINCTORIA, sp.nov.

♂♀. 24-26 mm. Head, thorax and abdomen creamy-grey ; thorax darker posteriorly. Palpi and antennæ light ochreous-fuscous. Forewings creamy-white, costa light, a patch near base reddish-grey, a patch on inner margin in 2nd and 3rd fourth ferruginous-red, more or less suffused or tinted into groundcolour

toward costa at apex; a fine inconspicuous line at $\frac{3}{4}$: cilia dark grey. Hindwings creamy-white; cilia light grey.

Brisbane; one specimen taken at light in 1891; Dr. Turner has this year beaten five or six specimens from *Eugenia*, on the stems of which it probably feeds.

XYLORYCTA STERCORATA, sp.nov.

♂. 30 mm. Head and palpi white. Antennæ white at base, becoming greyer toward apex. Thorax white, with a conspicuous dorsal patch of fuscous, varied by shades of purplish-grey, white and fuscous and spreading laterally posteriorly. Abdomen white, 2nd segment reddish-fuscous and loosely covered with white hairs. Legs white. Forewings elongate, gently dilate, costa gently rounded, hindmargin nearly straight; white, with a number of pale leaden-coloured spots imitative of birds' droppings; an acute spot in centre and a splash tinted with ferrous in inner angle of base; a triangular blotch at $\frac{2}{5}$ costa; five round spots, 1st near costa at $\frac{1}{8}$, 2nd obliquely to 1st and posterior, 3rd before middle in centre of wing, 4th at $\frac{3}{4}$ of wing, 5th in a line with 4th but nearer to costa; two sharp dots arranged diagonally with 1st and 2nd spots; four dots forming a rhomboid figure at $\frac{2}{3}$, the two hinder ones tinted with purplish-black; an obscure dot on hindmargin at $\frac{5}{6}$, and another half-way between this and apex; three rows of fine hindmarginal spots: cilia white. Hindwings and cilia white.

Brisbane; bred from *Elæocarpus obovatus*: also one specimen at light.

As this species rests closed up on the leaf, it looks exactly like a bird's dropping.

MAROGA UNDOSA, sp.nov.

♂♀. 30-36 mm. Head and thorax light slaty-grey, in ♀ tinted with copper colour. Palpi black, tipped with white. Antennæ black in basal third, black and white annuated in middle, and white in apical third. Legs black, anterior coxæ snow-white, posterior pair copper-coloured. Forewings elongate, gently dilate,

costa in ♂ prominently bowed at $\frac{2}{3}$, in ♀ more arched, scooped out before apex, apex produced and rounded, hindmargin scooped under apex, rounded in anal half; in ♂ light greenish-copper, with a median irregular band, and a suffused anal hindmarginal patch tinted with creamy-ochreous; in ♀ with a groundcolour of copper shaded on borders with fuscous; a black discoidal spot at $\frac{2}{3}$ close to median; a dark fuscous line of shading on apex and apical half of hindborder, and a thin fuscous line along middle $\frac{2}{4}$ of inner border: cilia dark fuscous in apical half, light ochreous in anal half. Hindwings reddish or coppery-fuscous; cilia coppery-red, fuscous on apical fourth.

Brisbane; three specimens reared by Mr. Illidge.

CATORYCTIS NONOLINEA, sp.nov.

♂. 14 mm. Head whitish-ochreous. Palpi ochreous, terminal joint tinted with fuscous. Antennæ white annulated with fuscous. Thorax whitish-ochreous, with a faint fuscous line laterally and posteriorly. Abdomen light fuscous-ochreous. Forewings elongate, costa gently arched, apex obtuse, hindmargin oblique, rich chocolate-fuscous with ochreous-silvery lines; a slender attenuated streak immediately beneath costa from base to $\frac{2}{5}$, a thin line immediately beneath this at $\frac{2}{3}$ running obliquely to $\frac{2}{3}$ costa, two short thin lines immediately beyond this and parallel, a short arrow-head line immediately beyond broadening in apical angle to apex, with a tendency to divide at apex, a moderately broad straight line from just before middle of wing to $\frac{1}{3}$ hindmargin, with a tendency to divide before hindmargin, a narrower line immediately beneath and parallel to this imperfectly divided on hindmargin, a moderately broad streak from inner margin at base to anal angle, with a similar line parallel and close to inner margin: cilia light fuscous with base more or less ochreous. Hindwings light shining ochreous, with a fuscous cloudy suffusion at apical angle narrowing to a point opposite middle of hindmargin; cilia ochreous.

Brisbane (Mr. Illidge); taken on *Casuarina suberosa*.

Near to *C. subnexella*, Walk.

CATORYCTIS MEDIOLINEA, sp.nov.

♂. 22 mm. Head and palpi whitish-ochreous. Antennæ finely white and black annulated. Thorax ochreous, white on dorsum. Abdomen ochreous. Forewings with costa rounded, whitish-ochreous with fuscous bands on veins; a broad median snow-white band from base narrowing sharply to a point at $\frac{5}{6}$; cilia ochreous. Hindwings light ochreous; cilia ochreous.

Brisbane (Mr. Illidge).